

Application Number		Application for (a-urban, b-agriculture, c-DWR/WUE:	
112		a) Prop 13 Urban Water Conservation	
Principle Applicant(Organization/Affiliation)			
The Metropolitan Water District of Sounthern California			
Project Title			
Residential High-Efficiency Clothes Washer Rebates			
First Name-Authorized		Last Name (AA):	Title
Stephen N.		Arakawa	Manager, Water Resource Management G
Street Address		PO Box	
		54153	
City		State	
Los Angeles		CA	
Zip Code		Telephone Number(Include Area Code)	
90054		(213) 217-6052	
Fax Number (Include Area Code)		E-mail Address	
(213) 217-6119		sarakawa@mwdh2o.com	
First Name-Contact Per	Last Name-CP:		Contact-Title
Ed	Thornhill		Manager, Regional Supply Unit
Contact-Street Address		Contact-PO Box	
		54153	
Contact-City		Contact-State	
Los Angeles		CA	
Contact-Zip Code		Contact-Phone Number	
90054		(213) 217-6568	
Contact-Fax Number		Contact-E-Mail Address	
(213) 217-7159		ethornhill@mwdh2o.com	
Funds Requested (dollar amount)	Applicant Funds Pledged (dollar amount)	Total Project Costs (dollar amou	
\$2,700,000.00	\$900,000.00	\$3,600,000.00	
Estimated Total Quantifiable Project Benefits (dollar amount)		Percentage of Benefits to be Accrued by App	
\$3,463,714.00		1	
Percentage of Benefits to be Accrued by CALFED or othe		Estimated Annual Water to be Saved (acre-fe	
		551	
Estimated Total Amount of Water to be Saved (acre-fee		Over _____ Number of Years	
8285		15	
Estimated Benefits to be Realized (terms of water qual,instream			
Duration of Project (month/year-month/year):		State-Wide	
10/02-09/05		<input type="checkbox"/>	
State Assembly District-location of project(35	State Senate District-location of project(1	18-40
State Assembly District-location of project(37-80	State Senate District-location of project(2	
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Congressional District(s)-location of project	25-52	Congressional District(s)-location of project(
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County-location of project	Most recent Urban Water Mgt Plan Submitt		
Los Angeles, Ventura, Orange , Riverside, San Brdo, San Die	1/12/2000		
Type Applicant-Urban(a)Agricl Feas Study(b) Gra	DWR WUE Projects	Project Focus	
e) other-subdivision of state(include public water)		b) Urban	

Project Type:

a) Implementation of Urban Best Management Practices

Quantifiable Objectives

Specify from choice (d) above

Specify from (k) above

Does Proposal involve change in land use (planned/future)ICheck box if yes

☐

PROPOSAL PART TWO

PROJECT SUMMARY

The Metropolitan Water District of Southern California (Metropolitan) is a water wholesaler serving 26 member agencies in Southern California. To meet increasing water demands, Metropolitan, in conjunction with its member agencies, pursues a multitude of opportunities to implement water demand management projects. A recently introduced technology in the American marketplace is the high-efficiency clothes washer (HECW). Water savings for the HECWs is estimated between 5,000 and 8,000 gallons annually, per machine, as compared to a conventionally designed model. Energy savings are a significant feature of these HECWs as well.

Most HECWs retail at between \$600 - \$1,100. (This compares to conventional clothes washers that retail in the \$300-\$400 range). This difference in price makes it hard for the average consumer to select the higher priced machines, even though the HECW may pay back the difference in lowered utility costs in as little as three years. This grant proposal is intended to make available to consumers a sufficiently large rebate amount (\$100 or more) to make purchases of the more expensive HECWs more attractive to consumers. As a result, water agencies will accelerate broader adoption of this water efficient technology and achieve water savings in the process.

Metropolitan is proposing a Residential High-Efficiency Clothes Washers (HECWs) Rebate Program in order to continue supporting its member agencies in expanding customer participation in HECW rebate programs. Existing HECW rebate programs would be allowed to continue uninterrupted. A total of 30,000, \$100-rebates would be offered to end-use residential customers through Metropolitan's participating member agencies. The rebates would be issued in an on-going fashion over the three year period of the grant. Metropolitan would provide \$750,000 in rebate funding (\$25 per unit) and an additional \$150,000 (\$5 per unit) in promotional support. Metropolitan is requesting \$2,250,000 (\$75 per unit) toward rebates and \$450,000 (\$15 per unit) for program administration, for a total request of \$2,700,000 from Proposition 13 funds. Additional funding is expected from Metropolitan's member agencies to increase the total rebate amount to make it more attractive to their customers. The 30,000 HECWs are expected to save 8285 acre feet of water over their functional life.

The funding request is composed of the following elements:

	Incentive (per HECW)	Total incentive value (@ 30,000 units)	Promotional Assistance (\$5 per HECW)	Project Administration (@ \$15 per HECW)	Totals (%)
Prop. 13	\$75	\$2,250,000		\$450,000	\$2,700,000 (75%)
Met	\$25	\$750,000	\$150,000		\$900,000 (25%)
Total	\$100	\$3,000,000	\$150,000	\$450,000	\$3,600,000

A. SCOPE OF WORK: RELEVANCE AND IMPORTANCE

1. Metropolitan is proposing a Residential High-Efficiency Clothes Washer (HECW) Rebate Program. The project scope is to achieve the installation of 30,000 HECWs in Metropolitan's service territory. The objectives of the project are several:

?? Provide a sizable enough number of rebates to cause greater awareness among the buying public that HECWs are being purchased by people they know and that their purchase is being encouraged by water agencies through rebates,

~~///~~ Achieve accelerated water savings by increasing the rate of HECW installations,

~~///~~ Maintain the momentum of recently initiated HECW rebate programs,

~~///~~ To influence, by means of financial incentive, the public's capital outlay selection when purchasing a clothes washer, by providing a base rebate of \$100 so that local water agencies unable to contribute additional funds will still be able to provide a viable incentive to consumers to purchase HECWs as opposed to conventional clothes washers,

~~///~~ Provide water agencies with the opportunity to augment the \$100 base rebate with additional funding to create a greater incentive for their customers to purchase HECWs,

~~///~~ Provide Metropolitan's member agencies with a consistent program design that will provide an opportunity for local and regional program marketing,

~~///~~ Save 8285 acre-feet of water over the 15-year life of the rebate program's HECW installations (0.276 acre-feet saved per machine x 30,000 machines).

Metropolitan intends to use the grant funding to support its member agencies in their efforts to add this water-saving technology to their rebate menus. A total of 30,000, \$100-rebates would be offered to end-use residential customers through Metropolitan's participating member agencies. Actual rebate amounts may be larger, depending on the local water agency's contribution. A program of this magnitude will be instrumental in fostering the transformation of the clothes washer market by tilting the scales in favor of HECWs.

The rebates would be issued by the local water agencies in an on-going fashion over the three year period of the grant. Metropolitan would provide \$750,000 in rebate funding (\$25 per unit) and an additional \$150,000 (\$5 per unit) in promotional support. Metropolitan is requesting \$2,250,000 (\$75 per unit) toward rebates and \$450,000 (\$15 per unit) for program administration. Additional funding is expected from Metropolitan's member agencies to increase the total rebate amount to make it more attractive to their customers. The 30,000 HECWs are expected to save 8285 acre feet of water over their functional life.

The sources of rebate funding would be:

/// Metropolitan	\$ 25
/// Proposition 13	+\$ <u>75</u>
Base Rebate Amount	\$100
/// Member agency ABC funding (optional)*	+\$ <u>X</u>
Final Rebate Amount (for customers of member agency ABC)	\$100 + \$X

* Additional member agency funding of up to \$200 per HECW is anticipated.

A table of the grant parties' financial contributions, by different project element, is shown below.

	Incentive (per HECW)	Total incentive value (@ 30,000 units)	Promotional Assistance (\$5 per HECW)	Project Administration (@ \$15 per HECW)	Totals
Prop. 13	\$75	\$2,250,000		\$450,000	\$2,700,000
Met	\$25	\$750,000	\$150,000		\$900,000
Total	\$100	\$3,000,000	\$150,000	\$450,000	\$3,600,000

2. For the past decade, water agencies in Metropolitan's service area have been successful at encouraging residential customers to change out their older, inefficient toilets for new, ultra-low-flow toilets through the use of rebates. Because there was a more-efficient replacement product available in the marketplace, a simple rebate was often sufficient to cause the older fixture to be replaced with a new, efficient model. Water agencies are happy with these programs because they provide long-term water demand reduction and a value added customer service to residences, generally the agency's largest customer segment. Because toilets use the most water in a residence, changing out the older toilets achieved the greatest amount of savings available from a single fixture-type.

Since the mid-1990s, new, high-efficiency clothes washers have been introduced into the marketplace. These new machines present the second largest water savings opportunity inside a residence. Water agencies with a track record of running fixture rebate programs have now begun adding high-efficiency clothes washers (HECWs) to their menu of rebates. The need for a rebate stems from the higher price of HECWs compared to conventional machines.

As more people become aware of the advantages of HECWs (energy, water, detergent savings and easier on clothes) the purchase volume will increase, leading to a reduction in price over time. It is important to foster this process, so that manufacturers do not abandon the effort to bring more efficient machines to the market. With rebates, water agencies can encourage customers to buy these more efficient machines now, thus reaping the water conservation benefits sooner and contributing to the transformation of the clothes washer market away from conventional machines. Assuming the clothes washer market transformation is successful, rebates would no longer be needed because the HECWs would become the consumer's natural choice.

These kinds of market transformations are necessary to continue realizing the water agencies' conservation expectations. Increasing the amount of water conservation – demand reduction – is necessary to meet the needs of the state's growing economy with its limited water supplies.

Metropolitan is committed to water conservation projects in order to: 1) reduce its demand for Bay-Delta water, 2) achieve the objectives of its 2000 Regional Urban Water Management Plan, 3) implement the components of its Integrated Water Resources Plan, and 4) comply with its obligations as a signatory to the Memorandum of Understanding Regarding Urban Water Conservation in California (MOU).

The replacement of conventional residential clothes washers with High Efficiency Clothes Washers (HECWs) fulfills Best Management Practice No. 6 of the MOU. Conventional clothes washers currently use the second largest portion of water inside a residence, behind toilets. By successfully encouraging residents to purchase HECWs rather than conventional washers, about 6,000 gallons of water can be saved per year for each HECW installed. Over a 15-year product life, each HECW is expected to conserve 90,000 gallons (0.276 acre-feet). In total, the project would save 8,285 acre-feet of water over the life of the washers.

HECW rebates of \$100 or more are currently offered by water agencies in Southern California. This level of rebate has begun to attract the volumes of customers that are desired to make an impact on water savings and the market transformation for clothes washers. Most HECWs retail at between \$600 - \$1,100. (This compares to conventional clothes washers that retail in the \$300-\$400 range). This grant proposal is intended to secure a sufficiently large base rebate amount (\$100) to make it attractive as a customer incentive, even if the local water agency chooses not to make any further contribution. This will allow existing programs to continue offering rebates without missing a beat.

To make the rebate more attractive, member agencies have the option of including additional rebate money for their customers. Many of Metropolitan's member agencies recognize that additional funding will do much to make this program successful, and they are willing to make such commitments. Currently, some agencies contribute over \$100, and some as much as \$200, of their own funding to make their HECW rebate attractive to their customers. Los Angeles Department of Water and Power has offered as much as \$300 per HECW. With a base rebate amount of \$100, water agencies contributing the same level of funding that they currently provide will create much larger rebates and thus, a powerful incentive for their customers to switch to HECWs.

In addition to saving water, HECWs can save up to 60 percent of the energy used with conventional washers. In light of the power situation in California, the installation of HECWs will be an important means of reducing demand for both electricity and natural gas. By using up to 40 percent less water than conventional clothes washers, HECWs require less heated water for washing. Also, because HECWs have much higher spin speeds than conventional washers, laundry from HECWs contains markedly lower moisture content than laundry from conventional washers. This, in turn, means less energy is required to dry the wash loads.

Since 1995 Metropolitan has issued over 21,000, \$35 HECW rebates for a total investment of \$735,000. During this period Metropolitan has partnered with its two largest member agencies (Los Angeles Department of Water and Power and the San Diego County Water Authority) and with regional energy suppliers, Southern California Edison (SCE) and San Diego Gas and Electric.

The energy utilities still run rebate programs for HECWs, but their programs tend to be offered on a limited time basis. While helpful, the continuity of an on-going program will be most effective in transforming people's buying habits. The energy utility rebates are cross-promoted by the water agencies to provide additional financial incentives. Municipalities that provide both water and energy often bundle the two rebates together, increasing their effectiveness. Overall, the existence of a secure \$100 base rebate amount makes these other incentive opportunities a positive program addition, as opposed to creating doubt about whether a program is still running or not, because their intermittent nature does not undermine the program's existence.

B. SCOPE OF WORK: TECHNICAL/SCIENTIFIC MERIT, FEASIBILITY, MONITORING AND ASSESSMENT

1. Metropolitan is currently implementing HECW rebate programs with 19 of its 26 member agencies. Current funding for these programs is expected to be exhausted by October, 2002. Receipt of the requested grant funds will allow the successful programs to continue without interruption. The contracts and program mechanics are already in-place, and momentum is established, so rapid deployment of the Proposition 13 funds will not be an obstacle.
2. Tasks, schedule and deliverables.

	Task	Month Due*	Deliverable
1	Amend contracts for participating member agencies	1	Amended contracts in-place
2	Develop promotional strategy	3	Advertisement plan
3	Add non-participating member agencies to the program	On-going	Addition of member agencies previously not participating
4	Implement promotion	5, 17, 26	Placed advertisements
5	Perform installation assessment	On-going	Documentation of findings
6	Provide Quarterly Reports	3,6,9,12...36	Quarterly Reports

* the number of months after receipt of grant funds

Schedule with expenditures.

QUARTERS

Tasks	1	2	3	4	5	6	7	8	9	10	11	12
Amend Contract for participating member												
Develop promo strategy												
Add non-participating agencies to program												
Implement promotions												
Perform installation assessment												
Provide Quarterly Reports												
Quarterly Expenditures (\$000)												
Prop 13 Rebate @ \$75	-	90	90	120	150	180	180	240	240	300	300	360
Prop 13 Admin. @ \$5	-	6	6	8	10	12	12	16	16	20	20	24
Prop 13 Expenditures	-	96	96	128	160	192	192	256	256	320	320	384
Metropolitan Incentives	-	30	30	40	50	60	60	80	80	100	100	120
Promo by Metropolitan	-	50				50			50			
Total Cost Share		80	30	40	50	110	60	80	130	100	100	120
Project Total	0	176	126	168	210	302	252	336	386	420	420	504

3. Monitoring and Assessment

Monitoring and assessing the program's progress will be accomplished via procedures that have been well-established in Metropolitan's HECW Program. Accompanying each invoice from the member agencies for HECW rebates paid will be an electronic database that identifies each customer who received a rebate. The database includes customer name, address, (with zip code), telephone number, make and model of HECW purchased, purchase price and the date the rebate was paid. In addition to the verification done by the member agencies, Metropolitan may spot-check the installation of HECWs at residences reported to have received a rebate. Also at that time, a brief customer satisfaction survey

will be completed as a vehicle to assess the success of the program from the customer's perspective. The results of those surveys will also be used as promotional testimony.

Water savings evaluations will be conducted by Metropolitan. The use of Conservation Credit funding presupposes a level of savings that cannot be well quantified at present. With a greater volume of HECW retrofits, the ability to do more rigorous analysis becomes possible. Metropolitan and its member agencies are collecting sufficient data to develop a regional savings evaluation. This will be done as part of Metropolitan's ongoing effort to substantiate the water savings generated from the financial investments it makes.

C. QUALIFICATIONS OF THE APPLICANTS AND COOPERATORS

1. See attached resumes for the following Metropolitan employees:

?? Alice Webb

?? Carlos de Leon

2. Cooperating Agencies

Metropolitan currently has agreements with 19 of its 26 member agencies to co-fund HECW rebate programs. It expects to execute agreements with some of remaining 7 member agencies who may desire to participate in the regional HECW rebate program. These member agencies may wish to see the program implemented first, before expressing interest in the program. They tend to be the smaller agencies that may have trouble allocating staff to implement the program. In addition to the water agencies, Metropolitan will explore means of working cooperatively with private energy suppliers, such as Southern California Edison, San Diego Gas & Electric, Southern California Gas Company and various sanitation districts.

D. BENEFITS AND COSTS

1. Project budget items, by funding entity:

	b. Planning / Design / Engineering	c. Materials / Installation	g. Construction / Administration / Overhead	Totals
Proposition 13		\$2,250,000	\$450,000	\$2,700,000
Metropolitan	\$150,000	\$750,000		\$900,000
Total	\$150,000	\$3,000,000	\$450,000	\$3,600,000

- b. Metropolitan's promotional efforts are part of the program's planning and design and are necessary to create awareness of the availability of the rebates. The program's success relies on broad dissemination of the information. Promotional efforts will consist of the

following types of outreach: advertisements, point-of-purchase materials, manufacturer tie-ins, bill stuffers, and the like.

- c. The rebate constitutes an installation subsidy, and so is budgeted as such.

$$30,000 \text{ units} \times \$100 = \$3,000,000$$

- g. Proposition 13's funding of program administration makes implementing the program less of a financial burden on the part of the participating member agencies.

$$30,000 \text{ units} \times \$15 \text{ per unit} = \$450,000 \quad \$15/\text{unit} \text{ can cover most of the cost of a vendor's services.}$$

2. Cost-Sharing in the amount of \$900,000 (25%) is being provided by Metropolitan. The rebate contribution of \$25 per HECW is budgeted as part of the Conservation Credits Program. Metropolitan's funding for Conservation Credits will continue through the duration of the program. Metropolitan's Conservation Credits expenditures in recent years have averaged more than \$10 million per year.

Use of the \$5 per unit promotional cost-share will be coordinated with the participating member agencies. It will be used either locally by them, or, if they request, regionally as implemented through the External Affairs Group within Metropolitan. Promotional efforts may include advertisements, point-of-purchase materials, manufacturer tie-ins, bill stuffers, website enhancements and other outreach ideas.

3. Benefit Summary

Water savings and their value are based on the table below:

Water Savings/Unit	# Units	Total Benefit		Present Value of Total Benefit
Acre-Feet / HECW	HECWs	Acre-Feet	\$ ²	\$ (2002) ³
0.276 ¹	30,000	8,285	\$5,799,150	\$ 3,463,714

1. Based on 6,000 gallons annual water savings per HECW and a 15-year machine life.

Savings estimates range from 5,250 gpy (CUWCC paper prepared by M. Cubed, March 20, 2001 and stated as a conservative estimate) to 7,000 gpy (Appliance Standards Awareness Project, *National Clothes Washer Standard: FAQ*, no date), to as much as 8,550 gpy (*Primer on Laundry Efficiency*, A P.O.W.E.R. Staff Report, 1993).

Machine life is generally estimated at 14-years, based on Appliance Magazine, *Appliance Life Expectancy/Replacement Picture*, September, 1997. The *Bern Clothes Washer Study, Final Report*, Oak Ridge National Laboratory, March, 1998, indicates that, "...the average clothes washer in the U.S. would be a little older than what a typical lifetime estimate would otherwise suggest." Page 12. The lifetime of the machine was adjusted up by one year to 15-years to accommodate this expectation.

2. Based on a benefit of \$700/acre-foot, level for 15 years.

3. Based on a discount rate of 6% and 15 years of savings per HECW, beginning in Year 2. For more details, see attached spreadsheet printout.

Metropolitan and its member agencies will share the avoided cost benefit of not having to import the water that is saved. CALFED also shares in the benefit, to a less quantifiable extent.

The benefits of the program will be consistent with CALFED's objectives as expressed in its Framework for Action (June 9, 2000) and the Record of Decision that followed. The proposed program will increase the amount of water saved through conservation. Once all 30,000 HECWs are installed, they will save 8,285 acre-feet of water over the projected 15 year life of the machines. By so doing, this program will support CALFED's objectives in the following manner.

- ~~///~~ Reduce elevated Delta salinity levels in the Delta by drawing less water from that source, thereby leaving more water for salinity diversion.
- ~~///~~ Enhance the aquatic habitats and ecological functions in the Bay-Delta by drawing less water from that source, particularly during dry periods with the impact of reduced water flow through the Delta is greatest.
- ~~///~~ Reduce the imbalance between available Bay-Delta water supplies and the various beneficial needs by providing a new local water supply that will offset a portion of current and future demands.

4. Assessment of Costs and Benefits

a. Assumptions

- ?? Metropolitan benefit is \$700 per AF.
- ?? 30,000 HECWs will be installed over 3 years.
- ?? 4,000 installed in year 1, 10,000 in year 2, 16,000 in year 3.
- ?? Each machine represents 0.01841 AFY savings
- ?? Machine life, and consequently the duration of savings, is 15 years

b. Benefits and costs in 2002 dollars, not discounted

- ?? Benefits = \$5,799,150
- ?? Costs = \$3,600,000

c. Present Value Equivalents for Benefits and Costs

- ?? Benefits = \$3,463,714 (in 2002 dollars at a 6% discount rate, over a total of 17 years)
- ?? Cost = \$3,320,869 (in 2002 dollars at a 6% discount rate, over a total of 3 years)

d. Benefits and Costs, by project entity

Entity	Benefit	Cost
Quantifiable Elements		
?? Metropolitan	\$3,463,714	\$900,000
?? Member Agencies	\$3,463,714	\$0
Non-quantified elements		
?? Metropolitan	Expanded program	administration
?? Member Agencies	Added value to customer	administration
?? HECW purchasers	Rebate and utility savings	Uncovered cost difference
?? CALFED	Reduced Bay-Delta demand	State administration of grants

e. Benefit/Cost (present value in 2002 dollars) = \$3,463,714 / \$3,320,869 = **1.04**

E. OUTREACH, COMMUNITY INVOLVEMENT AND ACCEPTANCE

Metropolitan's member agencies have long track record of using local community organizations in the implementation of their conservation programs. There continues to be a commitment to include local organizations in programs such as these, although quantification is not currently available.

Metropolitan's position on numerous boards and committees will be used to include a variety of potential supporters. Watershed councils, environmental non-governmental organizations, business roundtables, chambers of commerce are all possible interested organizations that will be supportive of the program.

Present HECW rebate programs are well received by the buying public and the retail outlets. Energy utilities welcome water agencies' operation of these programs and their added help in promotion and outreach will further boost participation.

Residential High-Efficiency Clothes Washer Rebates

Calculation of present value benefits (2002 dollars)

Savings = 6,000 gallons/yr/HECW = 0.01841 AFY

using 6%

<u>Grant Year</u>	<u>HECWs installed</u>	<u>[0.01841 AFY/HECW] Annual Savings of HECWs Installed (AFY)</u>	<u>Savings stream in Successive Years (AFY)</u>	<u>Benefits of Savings at \$700/AF (\$)</u>	<u>Year of Water Savings Realization</u>	<u>Non-discounted Benefit Stream (\$)</u>	<u>Discounted Benefit Stream (\$)</u>
1	4,000	73.6	73.6	\$ 51,548	1		
2	10,000	184.1	257.7	\$ 180,418	2	\$ 51,548	\$ 48,630
3	16,000	294.6	552.3	\$ 386,610	3	\$ 180,418	\$ 160,571
			552.3	\$ 386,610	4	\$ 386,610	\$ 324,605
			552.3	\$ 386,610	5	\$ 386,610	\$ 306,231
			552.3	\$ 386,610	6	\$ 386,610	\$ 288,897
			552.3	\$ 386,610	7	\$ 386,610	\$ 272,545
			552.3	\$ 386,610	8	\$ 386,610	\$ 257,118
			552.3	\$ 386,610	9	\$ 386,610	\$ 242,564
			552.3	\$ 386,610	10	\$ 386,610	\$ 228,834
			552.3	\$ 386,610	11	\$ 386,610	\$ 215,881
			552.3	\$ 386,610	12	\$ 386,610	\$ 203,661
			552.3	\$ 386,610	13	\$ 386,610	\$ 192,133
			552.3	\$ 386,610	14	\$ 386,610	\$ 181,258
			552.3	\$ 386,610	15	\$ 386,610	\$ 170,998
			478.7	\$ 335,062	16	\$ 386,610	\$ 161,319
			294.6	\$ 206,192	17	\$ 335,062	\$ 131,896
			0	\$ -	18	\$ 206,192	\$ 76,572
			8285			\$ 5,799,150	\$ 3,463,714

Calculation of present value costs (2002 dollars)

at 6%

<u>Grant Year</u>	<u>No. of HECWs installed</u>	<u>Non-discounted Associated Cost (\$120/unit)</u>	<u>Discounted Cost Stream</u>
1	4,000	\$ 480,000	\$ 480,000
2	10,000	\$ 1,200,000	\$ 1,132,075
3	16,000	\$ 1,920,000	\$ 1,708,793
		\$ 3,600,000	\$ 3,320,869

Alice Webb
1770 Via Petirrojo, #D
Thousand Oaks, California 91320
(818) 399-5204

WORK EXPERIENCE

10/91 – Present

**Metropolitan Water District of Southern California
Conservation Branch**

Currently manage Metropolitan's Residential Conservation Program, which includes the Ultra-Low-Flush Toilet Program, Residential Survey Program, High-Efficiency Clothes Washer Program and the "Protector del Agua" Training Program, which is a very popular landscape education program. Prior to this position, managed the Large Landscape and Landscape Education Program for Metropolitan's Conservation Branch. Responsibilities include creating new programs, managing contracts for all programs, and managing consultant agreements as needed. Also worked with programmers to create a Conservation Module for Metropolitan's water billing system (WINS) software and wrote the documentation for the program. Represented Metropolitan as Landscape Committee Chair for the California Urban Water Conservation Council and have participated and chaired several Project Advisory Committees at the state level for conservation projects.

10/88 – 8/91

**Everywoman's Village
Computer Instructor**

Everywoman's Village is a non-profit adult learning center. Hired as computer instructor for one class, taught three times each semester. Developed computer department materials and curriculum for ten different classes taught up to seven times each semester. Responsible for scheduling classes, promoting classes, student placement, maintaining computers, teaching classes, and providing technical support to students. Assisted office with computerizing production of their catalog of classes. Once each month held a community service non-computer users workshop. Taught a typing class, a beginning computer class, WordPerfect, and Lotus 1-2-3. For two semesters taught brush-up classes in vocabulary and math.

4/88 – 4/91

W.S.H. Services

Partner

W.S.H. Services was a computer service business. Primarily provided computer instruction, both in classrooms and in private offices and homes. In addition designed business cards, flyers, brochures, newsletters, and restaurant menus on the computer. Trained and provided telephone support throughout Southern California. Did marketing for the business, all bookkeeping and accounting, as well as daily upkeep of business.

5/85 – 3/89

Dav-Tech Computer Center

Office Manager

Dav-Tech Computer Center is a retail computer store and service center, specializing in Hewlett-Packard business computers. Hired to do shipping/receiving, delivery, and set-up of computers. After one year became Office Manager and handled all accounts payable, accounts receivable, payroll, commissions, invoicing, generated purchase orders and reports using MICA Accounting Software. Responsible for telephone orders, customer service, collections of overdue payments, placing orders, oversight of shipping and receiving, correspondence and service agreements. Designed advertisements using computer graphics software and created forms to streamline order process. Responsible for orders from the time they were placed until received by the customer.

EDUCATION

Graduated from Pepperdine University in 1996, Magna Cum Laude, with a Bachelor's of Science in Business Management.

JUAN CARLOS DE LEON
27642 North Spandau Drive
Santa Clarita, CA 91350
(661) 296-9128

EDUCATION

B.S. in Engineering, May 1984
California State University, Northridge

CERTIFICATION

Registered Professional Civil Engineer (Certificate No. C54063)
State of California, Board of Registration for Civil Engineers

EXPERIENCE

April 2001-
Present

Water Resource Specialist – Water Resource Management Group
Metropolitan Water District of Southern California

- Administer and Manage Metropolitans Residential Ultra Low Flow Toilet (ULFT) and Residential High Efficiency Clothes Washer (HECW) Programs.

June 1998-
April 2001

Associate Engineer – Project Management Branch
Metropolitan Water District of Southern California

- Prepare Project Management Plans (PMP) for Capital Projects.
- Prepare Monthly Status Reports (MSR) for Capital Projects.
- Monitor and track consultants agreements.
- Monitor and track project costs.

Oct 1994-
June 1998

Associate Engineer - Quality Control and Value Engineering Branch
Metropolitan Water District of Southern California

- Established a Value Engineering (VE) program.
- Supervised and administered VE studies
- Quality Assurance duties; reviewed plans and specifications
- Coordinated completion of Benchmark and Productivity Studies.

Nov 1989-
Oct 1994

Civil Engineering Associate
City of Santa Clarita

- Construction contract administration for Capital Improvement Projects.
- Supervised and monitored consultants.
- Prepared and evaluated Request for Proposals (RFP's).
- Negotiated contracts to procure engineering services.
- Prepared full bid packages, specifications and contract documents.
- Assessed and processed public permits, right-of-way acquisition, and utility coordination for Capital Improvement Projects.
- Developed the City's Five Year Capital Improvement Program.
- Acted as Liaison with MTA, and LA County Department of Public Works.

Nov 1987 -
Nov 1989

Civil Engineering Associate - Land Development Division
City of Los Angeles, Department of Public Works

- Supervised and prepared the City Engineers's report for parcel maps, zone changes & variances and environmental impact reports.
- Performed right-of-way engineering for dedications and quit claims of public easements, transfers of jurisdiction, and street vacations.

June 1987 -
Nov 1987

Civil Engineering Assistant - B-Permit Section
City of Los Angeles, Department of Public Works

- Reviewed, approved building plans and permits for highway dedication and driveway clearance.
- Prepared construction bond estimates, and issued performance & labor bonds for private development projects.
- Processed and issued revocable permits for public encroachments.
- Assisted the public at permit counter.

July 1984 -
June 1987

Civil Engineering Assistant - Wastewater Engineering Division
City of Los Angeles, Department of Public Works

- Planned, designed, and administered major sewer projects.
- Performed hydrologic and hydraulic studies to determine future sewer needs.
- Processed, designed, and administered sewer Assessment Act Projects.
- Plan checked sewer improvement plans submitted by private engineers.
- Determined sewer improvements and fees for private development proposals.
- Assisted the public at permit counter.
- Reviewed, and approved building plans and permits.

AFFILIATIONS

American Society of Civil Engineering (ASCE)
American Public Works Association (APWA)
Society of American Value Engineers (SAVE)
MWD Management Development Club
Toast Masters International

REFERENCES

Available upon request